

WO 2004/038013

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SEQUENCE LISTING

<110> Consortium für elektrochemische Industrie GmbH

<120> Feedback-resistant homoserine transsuccinylases
having a modified C-terminus

<130> Co10221

<140>

<141>

<160> 12

<170> PatentIn Ver. 2.0

<210> 1

<211> 930

<212> DNA

<213> Escherichia coli

<220>

<221> CDS

<222> (1)..(930)

<300>

<301> Blattner, F. R.

<302> The complete genome sequence of Escherichia coli K-12.

<303> Science

<304> 277

<305> 533

<306> 1453-1474

<307> 1997

<308> Blattner, F.R.

<400> 1

atg ccg att cgt gtg ccg gac gag cta ccc gcc gtc aat ttc ttg cgt 48
Met Pro Ile Arg Val Pro Asp Glu Leu Pro Ala Val Asn Phe Leu Arg
1 5 10 15

gaa gaa aac gtc ttt gtg atg aca act tct cgt gcg tct ggt cag gaa 96
Glu Glu Asn Val Phe Val Met Thr Thr Ser Arg Ala Ser Gly Gln Glu
20 25 30

att cgt cca ctt aag gtt ctg atc ctt aac ctg atg ccg aag aag att 144
Ile Arg Pro Leu Lys Val Leu Ile Leu Asn Leu Met Pro Lys Lys Ile
35 40 45

gaa act gaa aat cag ttt ctg cgc ctg ctt tca aac tca cct ttg cag 192
Glu Thr Glu Asn Gln Phe Leu Arg Leu Leu Ser Asn Ser Pro Leu Gln
50 55 60

gtc gat att cag ctg ttg cgc atc gat tcc cgt gaa tcg cgc aac acg 240
Val Asp Ile Gln Leu Leu Arg Ile Asp Ser Arg Glu Ser Arg Asn Thr
65 70 75 80

ccc gca gag cat ctg aac aac ttc tac tgt aac ttt gaa gat att cag 288
Pro Ala Glu His Leu Asn Asn Phe Tyr Cys Asn Phe Glu Asp Ile Gln
85 90 95

gat cag aac ttt gac ggt ttg att gta act ggt gcg ccg ctg ggc ctg 336

Asp Gln Asn Phe Asp Gly Leu Ile Val Thr Gly Ala Pro Leu Gly Leu

100

105

110

gtg gag ttt aat gat gtc gct tac tgg ccg cag atc aaa cag gtg ctg 384

Val Glu Phe Asn Asp Val Ala Tyr Trp Pro Gln Ile Lys Gln Val Leu

115

120

125

gag tgg tcg aaa gat cac gtc acc tcg acg ctg ttt gtc tgc tgg gcg 432

Glu Trp Ser Lys Asp His Val Thr Ser Thr Leu Phe Val Cys Trp Ala

130

135

140

gta cag gcc gcg ctc aat atc ctc tac ggc att cct aag caa act cgc 480

Val Gln Ala Ala Leu Asn Ile Leu Tyr Gly Ile Pro Lys Gln Thr Arg

145

150

155

160

acc gaa aaa ctc tct ggc gtt tac gag cat cat att ctc cat cct cat 528

Thr Glu Lys Leu Ser Gly Val Tyr Glu His His Ile Leu His Pro His

165

170

175

gcg ctt ctg acg cgt ggc ttt gat gat tca ttc ctg gca ccg cat tcg 576

Ala Leu Leu Thr Arg Gly Phe Asp Asp Ser Phe Leu Ala Pro His Ser

180

185

190

cgc tat gct gac ttt ccg gca gcg ttg att cgt gat tac acc gat ctg 624

Arg Tyr Ala Asp Phe Pro Ala Ala Leu Ile Arg Asp Tyr Thr Asp Leu

195

200

205

gaa att ctg gca gag acg gaa gaa ggg gat gca tat ctg ttt gcc agt 672

Glu Ile Leu Ala Glu Thr Glu Glu Gly Asp Ala Tyr Leu Phe Ala Ser

210

215

220

aaa gat aag cgc att gcc ttt gtg acg ggc cat ccc gaa tat gat gcg 720

Lys Asp Lys Arg Ile Ala Phe Val Thr Gly His Pro Glu Tyr Asp Ala

225

230

235

240

caa acg ctg gcg cag gaa ttt ttc cgc gat gtg gaa gcc gga cta gac 768

Gln Thr Leu Ala Gln Glu Phe Phe Arg Asp Val Glu Ala Gly Leu Asp

245

250

255

ccg gat gta ccg tat aac tat ttc ccg cac aat gat ccg caa aat aca 816

Pro Asp Val Pro Tyr Asn Tyr Phe Pro His Asn Asp Pro Gln Asn Thr

260

265

270

ccg cga gcg agc tgg cgt agt cac ggt aat tta ctg ttt acc aac tgg 864

Pro Arg Ala Ser Trp Arg Ser His Gly Asn Leu Leu Phe Thr Asn Trp

275

280

285

ctc aac tat tac gtc tac cag atc acg cca tac gat cta cgg cac atg 912

Leu Asn Tyr Tyr Val Tyr Gln Ile Thr Pro Tyr Asp Leu Arg His Met

290

295

300

aat cca acg ctg gat taa

930

Asn Pro Thr Leu Asp

305

310

<210> 2

<211> 309

<212> PRT

<213> Escherichia coli

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<400> 2

Met Pro Ile Arg Val Pro Asp Glu Leu Pro Ala Val Asn Phe Leu Arg

1 5 10 15

Glu Glu Asn Val Phe Val Met Thr Thr Ser Arg Ala Ser Gly Gln Glu

20 25 30

Ile Arg Pro Leu Lys Val Leu Ile Leu Asn Leu Met Pro Lys Lys Ile

35 40 45

Glu Thr Glu Asn Gln Phe Leu Arg Leu Leu Ser Asn Ser Pro Leu Gln

50 55 60

Val Asp Ile Gln Leu Leu Arg Ile Asp Ser Arg Glu Ser Arg Asn Thr

65 70 75 80

Pro Ala Glu His Leu Asn Asn Phe Tyr Cys Asn Phe Glu Asp Ile Gln

85 90 95

Asp Gln Asn Phe Asp Gly Leu Ile Val Thr Gly Ala Pro Leu Gly Leu

100 105 110

Val Glu Phe Asn Asp Val Ala Tyr Trp Pro Gln Ile Lys Gln Val Leu

115 120 125

Glu Trp Ser Lys Asp His Val Thr Ser Thr Leu Phe Val Cys Trp Ala

130 135 140

Val Gln Ala Ala Leu Asn Ile Leu Tyr Gly Ile Pro Lys Gln Thr Arg

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145	150	155	160	
Thr Glu Lys Leu Ser Gly Val Tyr Glu His His Ile Leu His Pro His				
	165	170	175	
Ala Leu Leu Thr Arg Gly Phe Asp Asp Ser Phe Leu Ala Pro His Ser				
	180	185	190	
Arg Tyr Ala Asp Phe Pro Ala Ala Leu Ile Arg Asp Tyr Thr Asp Leu				
	195	200	205	
Glu Ile Leu Ala Glu Thr Glu Glu Gly Asp Ala Tyr Leu Phe Ala Ser				
	210	215	220	
Lys Asp Lys Arg Ile Ala Phe Val Thr Gly His Pro Glu Tyr Asp Ala				
	225	230	235	240
Gln Thr Leu Ala Gln Glu Phe Phe Arg Asp Val Glu Ala Gly Leu Asp				
	245	250	255	
Pro Asp Val Pro Tyr Asn Tyr Phe Pro His Asn Asp Pro Gln Asn Thr				
	260	265	270	
Pro Arg Ala Ser Trp Arg Ser His Gly Asn Leu Leu Phe Thr Asn Trp				
	275	280	285	
Leu Asn Tyr Tyr Val Tyr Gln Ile Thr Pro Tyr Asp Leu Arg His Met				
	290	295	300	
Asn Pro Thr Leu Asp				

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<210> 3

<211> 34

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:

Oligonucleotide metAdel1

<400> 3

ctatttggtta gtgaataata gtactgagct ctgg

34

<210> 4

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:

Oligonucleotide metAdel2

<400> 4

ctgggtggata tatgagatct ggtagacgta atag

34

<210> 5

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:

Oligonucleotide metAext1

<400> 5

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33

<210> 6

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:

Oligonucleotide metAext2

<400> 6

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34

<210> 7

<211> 33

<212> DNA

<213> Artificial Sequence

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<220>

<223> Description of Artificial Sequence: Partial Gene
Sequence

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33

<210> 8

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Partial
Protein Sequence

<400> 8

Ser Tyr Ile His Gln Leu Phe Val Ser Glu

1

5

10

<210> 9

<211> 102

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Partial Gene
Sequence

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<400> 9

tcatatatcc accactatatt gttagtgaat aatagtactg agctctggat gcatacgcgt 60

ttaattaagc ggccgcactg cgatgagtgg cagggcgggg cg

102

<210> 10

<211> 34

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Partial

Protein Sequence

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Met His Thr Arg Leu Ile Lys Arg Pro His Cys Asp Glu Trp Gln Gly

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Gly Ala

<210> 11

<211> 102

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Partial Gene
Sequence

<400> 11

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ttaattaagc ggccgcactg cgatgagtgg cagggcgggg cg 102

<210> 12

<211> 34

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Partial
Protein Sequence

<400> 12

Ser Tyr Ile His Gln Tyr Leu Leu Val Asn Asn Ser Thr Glu Leu Trp

1

5

10

15

Met His Thr Arg Leu Ile Lys Arg Pro His Cys Asp Glu Trp Gln Gly

20

25

30

Gly Ala